# **County of Loudoun**

## **Department of Planning**

### **MEMORANDUM**

**DATE:** August 19, 2005

**TO:** THE LOUDOUN COUNTY PLANNING COMMISSION

FROM: Cindy Keegan, AICP, Project Manager

CPAM 2005-0003, Comprehensive Plan Amendment for

Upper Broad Run and Upper Foley Subareas

**SUBJECT:** Information for Upcoming Planning Commission Worksession,

August 22, 2005

#### **BACKGROUND**

At the conclusion of the Planning Commission worksession on July 25, staff was directed to prepare land use scenarios for the study area. The parameters set by the Commission were (1) a residential density of 4.0 units per acre in the Upper Broad Run subarea and 3.0 units per acre in the Upper Foley subarea; (2) take environmental resources into account; and (3) include lower densities closer to the Rural Policy Area. Staff was also asked to provide a comparison of the road alignments proposed in the 1995 Countywide Transportation Plan and the current Transportation Plan.

In developing the land use scenarios, staff made several additional assumptions:

- 1. The development pattern would include a limited mix of retail and employment space that collectively represents about 5 percent of the developable area.
- 2. The residential unit mix would reflect that currently in Dulles South.
- 3. Development would avoid the River and Stream Corridors as defined in the Revised General Plan.
- 4. The required open and civic space would total 40 percent of the gross area as recommended by the Plan for residential neighborhoods in the Suburban Policy Area.
- 5. The homes in Lenah Run and The Marches would not redevelop.

In developing the scenarios, staff enlisted the expertise of the planning and design firm Sympoetica. Sympoetica has extensive experience designing public and private land development projects, including experience in Loudoun County. A brief company description is attached (Attachment 1).

#### **OBJECTIVE**

The purpose of the August 22 work session is to evaluate the proposed scenario and to provide staff with sufficient direction to develop policy language for consideration at the upcoming public hearing in September. To facilitate this discussion, Sympoetica will present and answer questions about the development scenarios. Following that discussion, we ask that the Commission provide direction on the following questions:

- 1. Is either of the development scenarios appropriate for the subarea or should the Commission recommend a different land use pattern?
- 2. Should development be allowed in both subareas or phased to reflect employment growth in the County or other economic or fiscal condition?
- 3. Should development in the subareas adhere to the Dulles South residential unit mix or should the County encourage more affordable housing products in support of workforce housing?
- 4. Should new development reflect the mixed use proposed in the scenarios or adhere to the land use policies and design guidelines of the <u>Revised General Plan</u> that encourage a higher percentage of employment and retail development to reduce traffic and provide a better fiscal balance?
- 5. Should new development mitigate capital facility impacts at the same rate recommended in the <u>Revised General Plan</u> or should the Commission recommend a different capital facilities standard that reflects the deficit of facilities in Dulles South and the subareas?
- 6. Should new development be permitted based on the applicant's ability to mitigate capital, transportation and other impacts or limited by the availability of adequate service and road capacity?
- 7. Should new development adhere to the environmental protection used in the scenarios or expand the resources being protected?
- 8. Should new development be allowed to proceed before solutions are found to the failing regional transportation systems?

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### **SCENARIO DISCUSSION**

Sympoetica will present the two land use scenarios at the work session (Attachments 2, 3, and 4). The following tables summarize the statistics associated with the scenarios and the development potential under current zoning. These cost estimates are based on the Board's adopted capital intensity factor outlined in Issues Paper 4, discussed at our last meeting. These numbers do not reflect the "reality check" capital needs also outlined in the Issues Paper.

## **Capital Impacts**

	Current Potential	Scenario 1	Scenario 1
Density	Existing Zoning (0.33 and 1.0 du/ac)		
Housing Units	4,571	27,977	27,944
Population	14,307	77,451	77,361
Students	3,657	15,997	15,976
Anticipated Capital Cost	\$172,143,860	\$790,622,493	\$789,624,514
County share of costs*	\$172,143,860	\$267,836,132	\$267,745,443
Development Share	\$0	\$522,786,361	\$521,879,071

<sup>\*</sup>The County share includes costs associated with "by-right" development and ADU's measured at 12.5% of total units for detached and attached units and 6.25% for multifamily units.

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# **Public Facility Needs**

Adopted Capital Facilities Standards were used to estimate the need of additional facilities (e.g., schools, fire and rescue stations, sheriff stations, parks, and libraries) under Scenario A and Scenario B. These numbers reflect the "reality check" capital needs also outlined in Issue Paper #4.

**Anticipated Need of Additional Public Facilities** 

	Current Potential	Scenario 1	Scenario 2
Density	Existing Zoning (0.33 and 1.0 du/ac)	UBR 4.0 du/ac UF 3.0 du/ac	3.6 du/ac
Housing Units	4,571	27,977	27,944
Population	14,307	77,451	77,361
Students	3,657	15,997	15,976
Elementary Schools	2	9	8
Middle Schools	1	3	3
High Schools	1	2	2
Total Schools	4	14	13
Community Parks	1	8	8
District Parks	0	3	3
Regional Parks	1	1	1
Total Parks	2	12	12
Recreation Centers	1	1	1
Senior Centers	1	1	1
Libraries	0	1	1
Public Safety Centers (Fire and Rescue/Sheriff)	0	2	2

## **Transportation Impacts**

Transportation staff will be available to present their analysis on Monday including a level of service analysis. The following tables summarize projected traffic volumes:

Estimate of Traffic Generation (Average Daily Trips [ADT])

	Current Potential	Scenario A	Scenario B
Residential Units	4,571	27,942	27,925
Employment- Retail	800 jobs	3,846,348 sq. ft.	3,846,348 sq. ft.
Residential Traffic (ADT)	43,744	216,339	216,451
Employment Retail Traffic (ADT)	3,200	82,265	82,265
Total traffic (ADT)	46,944	298,604	298,716

The total traffic estimates reflect buildout in the subareas. The table below projects the increase in traffic volumes (ADT) at different intersections in 15 years (2020) using distribution factors taken from recent traffic studies conducted in the Route 50 corridor. Consequently the numbers below do not reflect complete buildout.

**Increased Traffic Volumes (ADT)** 

Total Traffic by 2020	251,772			
Less 25 Percent Internal Traffic	188,829			
Increases Over Current Model Average Daily Trips by Location				
Route 50 west of Route 659 Relocated	56,649			
Route 50 West of Loudoun County Parkway	37,766			
Route 50 West of Pleasant Valley Road	28,324			
Route 50 at Route 860-Route 15	18,882			
Route 621 North of Route 860	18,882			
Route 659 Relocated South of Ryan Road	18,882			
Route 659 Relocated South of Braddock Road	9,441			
West Spine Road South of Braddock Road	9,441			
Tri-County Parkway South of Braddock Road	18,882			
West Spine Road West of Loudoun County Parkway	28,324			
Tall Cedars Parkway West of Loudoun County Parkway	18,882			
Route 50 North Collector Road West of West Spine Road	18,882			
Route 606 East of Loudoun County Parkway	18,882			
Loudoun County Parkway North of Route 606	9,441			
Braddock Road West of Route 659/West Spine Road	18,882			

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# **Public Comment**

Staff has received one public comment letter since the last work session (Attachment 5).